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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,678	10/10/2005	Andreas Bacher	WAS0708PUSA	3843
22045 7590 08/13/2008 BROOKS KUSHMAN P.C. 1000 TOWN CENTER TWENTY-SECOND FLOOR SOUTHFIELD, MI 48075				
EXAMINER				
OJURONGBE, OLATUNDE S				
ART UNIT		PAPER NUMBER		
1796				
MAIL DATE		DELIVERY MODE		
08/13/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/552,678

Applicant(s)

BACHER ET AL.

Examiner

OLATUNDE S. OJURONGBE

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. The Amendment filed 12 May 2008 has been entered. Claims 8-17 remain pending in the application.

Terminal Disclaimer

2. The terminal disclaimer filed on 12 May 2008 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of the full statutory term as presently shortened by any terminal disclaimer of any patent issuing from U.S. Patent Application Serial No. 10/557,751, has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. **Claims 8-17** are rejected under 35 U.S.C. 103(a) as being unpatentable over Maruyama et al (US 4,617,239) in view of Tschirner et al (US 6,211, 289).

Regarding **claims 8 and 9**, Maruyama et al teaches using a coating agent to form a water resistant intermediate layer between a substrate and an image receiving layer of a printing plate (col.9, lines 26-42); said coating agent composed of modified polyvinyl alcohol containing silicon in the molecule (col.2, lines 6-7). Maruyama et al further teaches that the silicon-containing modified PVA should be preferably produced by saponifying a copolymer of a vinyl ester and a silicon-containing olefinic unsaturated monomer (col.7, lines 9-12) and that the content of silicon in the silicon-containing modified PVA is usually from 0.01 to 10 mol% and the degree of saponification is usually 70 to 100 mol% (col.7, line 65-col.8, line 5). The water resistant intermediate layer serves as the primer of the instant claim.

Maruyama et al does not teach the vinyl ester copolymers of the instant claim.

Tschirner et al teaches that aqueous solutions of copolymeric polyvinyl alcohols prepared by saponification of copolymers containing vinyl acetate and 1-alkylvinyl acetate units have an unlimited shelf life at room temperature (col.2, lines 7-9) and further teaches 1-alkylvinyl alcohol/vinyl alcohol and 1-alkylvinyl acetate/vinyl acetate in a weight ratio of from 1/99 to 40/60 (col.2, lines 41-44) and that suitable alkyl groups are C₁-C₄ radicals (col.2, line 26).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the 1-alkylvinyl acetate/vinyl acetate of Tschirner et al in the invention of Maruyama et al in order to have modified PVA with unlimited shelf life at room temperature.

The silicon-containing modified polyvinyl alcohol and degree of saponification of modified Maruyama et al are the same as the silane-containing polyvinyl alcohol and degree of hydrolysis of the instant claim respectively.

Though modified Maruyama et al does not teach the preamble to the claim, drafting a claim in Jepson format is taken as an implied admission that the subject matter of the preamble is the prior art work of another.

Though modified Maruyama et al does not teach the process wherein the at least one silane-containing polyvinyl alcohol is derived as in the instant claim, the examiner notes that this limitation is a product-by-process limitation which does not confer patentability on the claim as patentability of a product does not depend on its method of production.

Regarding **claim 10**, modified Maruyama et al teaches all the claim limitations as set forth above and further teaches suitable alkyl groups such as methyl, ethyl and n-propyl radicals with preference given to the methyl group (Tschirner et al, col.2, lines 26-28); this inherently teaches 1-methyl vinyl acetate, 1-ethyl vinyl acetate and 1-propylvinyl acetate.

Regarding **claims 11-13**, modified Maruyama et al teaches all the claim limitations as set forth above and further teaches the silicon-containing olefinic unsaturated monomer used in the invention to include vinylsilanes and (meth)acrylamide-alkylsilanes (col.3, line12- col.6, line 28) and exemplifies vinyltrimethoxysilane (col.11, lines 55-56). Vinyltrimethoxysilane is a vinyltri(alkoxy)silane consisting of methoxy radicals.

Regarding **claim 14**, modified Maruyama et al teaches all the claim limitations as set forth above and further teaches introducing the silylating agent in the range of 0.01 to 10 mol% (col.2, lines 58-61).

Regarding **claim 15**, modified Maruyama et al teaches all the claim limitations as set forth above and further teaches that the coating agent of the invention may be used to produce converting paper by applying the coating agent (col.10, lines 36-37 and col.10, lines 42-45); modified Maruyama et al further teaches that converting paper is a stock from which are produced release paper by applying a release agent such as silicone resin (col.10, lines 37-39). This inherently teaches a release paper comprising:

- a paper, which serves as the substrate,
- the coating agent of the invention applied to the paper, the coating agent serves as the primer coat,
- a release agent, such as silicone resin applied over the primer.

Regarding **claim 16**, Maruyama et al teaches a coating agent used to produce converting paper by applying the coating agent (col.10, lines 36-37 and col.10, lines 42-45); Maruyama et al further teaches that converting paper is a stock from which are produced release paper by applying a release agent such as silicone resin (col.10, lines 37-39). This inherently teaches a release paper comprising:

- a paper, which serves as the substrate,
- a coating agent applied to the paper, the coating agent serves as the primer coat,
- a release agent, such as silicone resin applied over the primer.

Maruyama et al further teaches the coating agent composed of modified polyvinyl alcohol containing silicon in the molecule (col.2, lines 6-7) and that the silicon-containing modified PVA should be preferably produced by saponifying a copolymer of a vinyl ester and a silicon-containing olefinic unsaturated monomer (col.7, lines 9-12) and that the content of silicon in the silicon-containing modified PVA is usually from 0.01 to 10 mol% and the degree of saponification is usually 70 to 100 mol% (col.7, line 65-col.8, line 5).

Maruyama et al does not teach the vinyl ester copolymers of the instant claim.

Tschirner et al teaches that aqueous solutions of copolymeric polyvinyl alcohols prepared by saponification of copolymers containing vinyl acetate and 1-alkylvinyl

acetate units have an unlimited shelf life at room temperature (col.2, lines 7-9) and further teaches 1-alkylvinyl alcohol/vinyl alcohol and 1-alkylvinyl acetate/vinyl acetate in a weight ratio of from 1/99 to 40/60 (col.2, lines 41-44) and that suitable alkyl groups are C1-C4 radicals (col.2, line 26).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the 1-alkylvinyl acetate/vinyl acetate of Tschirner et al in the invention of Maruyama et al in order to have modified PVA with unlimited shelf life at room temperature.

The silicon-containing modified polyvinyl alcohol and degree of saponification of modified Maruyama et al are the same as the silane-containing polyvinyl alcohol and degree of hydrolysis of the instant claim respectively.

Though modified Maruyama et al does not teach the process wherein the at least one silane-containing polyvinyl alcohol is derived as in the instant claim, the examiner notes that this limitation is a product-by-process limitation which does not confer patentability on the claim as patentability of a product does not depend on its method of production.

Regarding **claim 17**, Maruyama et al teaches using a coating agent to form a water resistant intermediate layer between a substrate and an image receiving layer of a printing plate (col.9, lines 26-42); said coating agent composed of modified polyvinyl alcohol containing silicon in the molecule (col.2, lines 6-7). Maruyama et al further teaches that the silicon-containing modified PVA should be preferably produced by saponifying a copolymer of a vinyl ester and a silicon-containing olefinic unsaturated

monomer (col.7, lines 9-12) and that the content of silicon in the silicon-containing modified PVA is usually from 0.01 to 10 mol% and the degree of saponification is usually 70 to 100 mol% (col.7, line 65-col.8, line 5).

The water resistant intermediate layer serves as the primer of the instant claim.

Maruyama et al does not teach the vinyl ester copolymers of the instant claim.

Tschirner et al teaches that aqueous solutions of copolymeric polyvinyl alcohols prepared by saponification of copolymers containing vinyl acetate and 1-alkylvinyl acetate units have an unlimited shelf life at room temperature (col.2, lines 7-9) and further teaches 1-alkylvinyl alcohol/vinyl alcohol and 1-alkylvinyl acetate/vinyl acetate in a weight ratio of from 1/99 to 40/60 (col.2, lines 41-44) and that suitable alkyl groups are C1-C4 radicals (col.2, line 26).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the 1-alkylvinyl acetate/vinyl acetate of Tschirner et al in the invention of Maruyama et al in order to have modified PVA with unlimited shelf life at room temperature.

The silicon-containing modified polyvinyl alcohol and degree of saponification of modified Maruyama et al are the same as the silane-containing polyvinyl alcohol and degree of hydrolysis of the instant claim respectively.

Though modified Maruyama et al does not teach the preamble to the claim, drafting a claim in Jepson format is taken as an implied admission that the subject matter of the preamble is the prior art work of another.

Though modified Maruyama et al does not teach process wherein the at least one silane-containing polyvinyl alcohol is derived as in the instant claim, the examiner notes that this limitation is a product-by-process limitation which does not confer patentability on the claim as patentability of a product does not depend on its method of production. The coating agent of modified Maruyama et al consists essentially of at least one silicon-containing modified PVA.

Response to Arguments

7. Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to OLATUNDE S. OJURONGBE whose telephone number is (571)270-3876. The examiner can normally be reached on Monday-Thursday, 7.15am-4.45pm, EST time, Alt Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571)272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

O.S.O.

/Randy Gulakowski/
Supervisory Patent Examiner, Art Unit 1796

